

GROUNDWATER CONJUNCTIVE USE

Description

CALFED has conducted a groundwater outreach program over the past several years and completed a set of guiding principles for implementation of conjunctive use programs. These principles emphasize local control and voluntary implementation of conjunctive use programs and adequate protection for third parties. CALFED has identified a target of 500 thousand acre-feet of new groundwater storage south of the Delta to be implemented during Stage 1. DWR, in cooperation with USBR and representing CALFED, is currently conducting a broad evaluation of potential conjunctive use and groundwater banking projects in all major groundwater basins within the CALFED solution area. In this effort, DWR and USBR are working cooperatively with local and regional stakeholders to study conjunctive water management potential and assist in moving feasible projects forward to implementation. DWR is authorized to provide \$230 million in loans and grants for groundwater recharge and conjunctive use projects through Proposition 13.

Potential benefits

- Improved dry period water supply reliability for local water users
- Efficient use and coordinated management of groundwater and surface water supplies
- Reduced groundwater overdraft, intrusion of poor quality water, and land subsidence
- Increased ability for local agencies to participate in drought water bank transfers and meet environmental flow requirements

Potential Impacts

- Improperly managed projects can result in unacceptable changes in groundwater levels and intrusion of poor quality water.
- Reduction in groundwater contribution to stream flow could occur if long-term groundwater levels are reduced below the historical average. Protective operation rules must be developed and implemented.

Implementation Issues

Groundwater management is a highly contentious issue. Uninhibited access to groundwater is viewed by many as a property right. Issues that may prevent project implementation are (1) local concerns regarding future groundwater levels, groundwater quality, and subsidence; (2) lack of local consensus on groundwater management; and (3) lack of assurances from the groundwater management authority to quickly respond to and resolve third party impacts of project operation. To overcome these barriers to project implementation, CALFED's Conjunctive Use Program is designed to formulate projects through a stakeholder process, leading to implementation with local control and ownership of the projects.

While improved groundwater conjunctive use promises many benefits, the desire to move programs quickly to implementation must be weighed with the need to provide adequate assurances to third parties to maintain local support.

Recommendations

Continue local agency outreach for basins with good conjunctive use potential. Allocate long-term financial resources to negotiate, plan, formulate, and implement locally supported, long-term conjunctive use projects. Some well-developed projects, such as the Semitropic/Vidler groundwater banking project in Kern County, could likely be implemented quickly and should be pursued. Use Proposition 13 funds to assist local entities to implement conjunctive use and groundwater banking projects.